# Public Notice

**US Army Corps of Engineers**
Sacramento District
1325 J Street
Sacramento, CA 95814-2922

Public Notice Number: SPK-2007-448-DC
Date: 3/29/2007
Comments Due: 4/29/2007
In reply, please refer to the Public Notice Number

**SUBJECT:** The U.S. Army Corps of Engineers, Sacramento District, (Corps) is evaluating a permit application for the Chattanooga Fen Ditch Restoration project, which would result in impacts to approximately 0.2 acres of waters of the United States, including wetlands, within the Mineral Creek watershed. This notice is to inform interested parties of the proposed activity and to solicit comments. This notice may also be viewed at the Corps web site at http://www.spk.usace.army.mil/regulatory.html.

**AUTHORITY:** This application is being evaluated under Section 404 of the Clean Water Act for the discharge of dredged or fill material in waters of the United States. This project is being reviewed as an Individual Permit because it does not qualify for a nationwide permit. In Colorado, all projects which result in a discharge of dredged or fill material into fens are revoked from the nationwide permit program.

**APPLICANT:** US Forest Service
San Juan National Forest
Attn: Kay Zillich
15 Burnett Ct
Durango, CO 81301

**LOCATION:** The project site is located at the Chattanooga Fen, 5 miles northwest of Silverton in Section 27, Township 42 South, Range 8 West, San Juan County, Colorado, and can be seen on the Silverton USGS Topographic Quadrangle.

**PROJECT DESCRIPTION:** The applicant is proposing to restore the lower portion of the Chattanooga Fen by plugging and filling the ditches located within the fen. The project purpose is to restore the proper hydrologic conditions to support the fen community.

**Background information**

Chattanooga Fen is one the largest and most unique iron fens in the San Juan Mountains, and possibly Colorado. Fens are unique wetland ecosystems that have perennially saturated soils produced by nearly constant groundwater inflow, and stable site conditions that persist for millennia. The permanently saturated conditions create oxygen-free soils that slow decomposition rates and allow organic matter (i.e peat) produced by wetland plants to accumulate. The perennial supply of cold ground water provides a critical refugium for hundreds of plant and animal species that in the western US persist only in fens. Many of these species have the main ranges of their distribution far to the north in Alaska and Canada. For example, a population of arctic peat moss, *Sphagnum balticum*, occurs at the Chattanooga Fen, which is disjunct by more than 2000 kilometers from its main range near Hudson's Bay in Canada (Cooper et al. 2002).

The processes of peat accumulation and species preservation are in a tenuous balance in the western mountains of the U.S. due to regional aridity, droughts and human caused hydrologic impacts. Activities such as ditches and diversions can reverse the process of peat accumulation.

Through a study commissioned in 2004, the San Juan US Forest Service (USFS) determined that the road running along the western edge of the Chattanooga Fen is intercepting spring and groundwater in several places. In addition the study identified and mapped 7 ditches concentrated in the lower Chattanooga fen area. These ditches have severely impacted the on the groundwater of the fens and have eliminated *Sphagnum* spp. from much of the area and are likely causing the peat to decay and become non-sustainable. It is unknown when the ditches were dug in the fen and for what purpose. It is possible they were dug as part of the mining operations in the early 1900s, or as part of the power line construction in the mid-20$^{th}$ century. The total combined length of the ditches is 450 meters. The ditches are about 1 meter in depth. When the ditches were excavated, material was side-casted along side the ditch creating a berm.

**Project Description**

The US Forest Service is proposing to restore the lower portion of Chattanooga fen by plugging and filling all seven ditches, planting *Sphagnum* and sedges where necessary, and conducting pre- and post-vegetation and hydrologic monitoring. The attached drawings provide additional project details.

A track hoe will be used to backfill the ditch using material from the berms. An excavator will be used to contour the slope to allow for natural groundwater flow. After the ditches are filled, the USFS will insert pieces of plywood or chipboard, perpendicular across the ditches, to keep the new fill from moving. One piece of chipboard will be placed every 25 meters.

Volunteers organized by Mountain Studies Institute (MSI) will replant the ditches by hand by placing sedge clumps moved by the excavator concurrently with the ditch filling. If additional vegetation is needed, volunteers will collect plugs of sedges (*Carex aquatilis* and *Carex utriculata*) from the greater fen complex, using hand shovels, and immediately planting and will immediately re-plant them in the bare soil. Carex plugs will be planted in the mid-summer just before the rainy season to ensure that the plugs do not dry out.

Intensive plant surveys will be conducted to quantify plant species and coverage for the impacted and non-impacted areas. The data from the surveys will record vegetation changes after restoration compared to vegetation above the ditches. In addition, the USFS along with the MSI will continue monitoring existing groundwater wells.

**ADDITIONAL INFORMATION:**

**Alternatives.** The applicant has not provided information concerning project alternatives. Additional information concerning project alternatives may be available from the applicant or their agent. Other alternatives may develop during the review process for this permit application. All reasonable project alternatives, in particular those which may be less damaging to the aquatic environment, will be considered.

**OTHER GOVERNMENTAL AUTHORIZATIONS:** Water quality certification or a waiver, as required under Section 401 of the Clean Water Act from the Colorado Department of Health and the Environment is required for this project. The applicant has not indicated they have applied for certification.

**HISTORIC PROPERTIES:** The Corps will initiate consultation with the State Historic Preservation Officer under Section 106 of the National Historic Preservation Act, as appropriate.

**ENDANGERED SPECIES:** The project will not affect any Federally-listed threatened or endangered species or their critical habitat that are protected by the Endangered Species Act.

The above determinations are based on information provided by the applicant and our preliminary review.

**EVALUATION FACTORS:** The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts, of the described activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit, which reasonably may be expected to accrue from the described activity, must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the described activity will be considered, including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, consideration of property ownership and, in general, the needs and welfare of the people. The activity's impact on the public interest will include application of the Section 404(b)(1) guidelines promulgated by the Administrator, Environmental Protection Agency (40 CFR Part 230).

The Corps is soliciting comments from the public, Federal, State, and local agencies and officials, Indian tribes, and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps to determine whether to issue, modify, condition, or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

**SUBMITTING COMMENTS:** Written comments, referencing Public Notice SPK-2007-448-DC, must be submitted to the office listed below on or before **April 29, 2007**:

Kara Hellige
US Army Corps of Engineers, Sacramento District
Durango Regulatory Office
799 E 3rd Street, #2
Durango, Colorado 81301
Email: kara.a.hellige@usace.army.mil

The Corps is particularly interested in receiving comments related to the proposal's probable impacts on the affected aquatic environment and the secondary and cumulative effects. Anyone may request, in writing, that a public hearing be held to consider this application. Requests shall specifically state, with particularity, the reason(s) for holding a public hearing. If the Corps determines that the information received in response to this notice is inadequate for thorough evaluation, a public hearing may be warranted. If a public hearing is warranted, interested parties will be notified of the time, date, and location. Please note that all comment letters received are subject to release to the public through the Freedom of Information Act. If you have questions or need additional information please contact the applicant or the Corps' project manager Kara Hellige at 970-375-9452, or e-mail at kara.a.hellige@usace.army.mil.

Attachments: 3 drawing